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(54) Method of controlling fine particulate flowback in subterranean wells

(57) A wellbore penetrating a subterranean formation is treated with a fluid whereby fine particulate flowback is reduced or prevented. The method includes the steps of providing a fluid suspension including a mixture of a particulate coated with a tackifying compound, pumping the suspension into a subterranean formation and depositing the mixture within the formation whereby the tackifying compound retards movement of at least a portion of any fine particulate within the formation upon flow of fluids from the subterranean formation through the wellbore. Alternatively, the tackifying compound may be introduced into a subterranean formation in a diluent containing solution to deposit upon previously introduced particulates to retard movement of such particulates and any fines subject to flow with production of fluids from the subterranean formation.

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EP 97 30 7807

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01-12-1998

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5501274 A	26-03-1996	EP 0735235 A	02-10-1996
		NO 953109 A	30-09-1996
		US 5787988 A	04-08-1998
		US 5833000 A	10-11-1998
		US 5775425 A	07-07-1998
US 5501275 A	26-03-1996	US 5439055 A	08-08-1996
		US 5330005 A	19-07-1994
		AU 679711 B	10-07-1997
		AU 5790894 A	06-10-1994
		CA 2119316 A	06-10-1994
		NO 941182 A	06-10-1994
		EP 0619415 A	12-10-1995
US 4010802 A	08-03-1977	CA 1040094 A	10-10-1978
US 3815680 A	11-06-1974	NONE	

EP 0 679 935 A3

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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		NO 953109 A	30-09-1996
		US 5787988 A	04-08-1998
		US 5833000 A	10-11-1998
		US 5775425 A	07-07-1998
US 5501275 A	26-03-1996	US 5439055 A	08-08-1995
		US 5330005 A	19-07-1994
		AU 679711 B	10-07-1997
		AU 5790894 A	06-10-1994
		CA 2119316 A	06-10-1994
		NO 941182 A	06-10-1994
		EP 0619415 A	12-10-1995
US 4010802 A	08-03-1977	CA 1040094 A	10-10-1978
US 3815680 A	11-06-1974	NONE	

EP 0 878 935 A3

For more details about this annex : see Official Journal of the European Patent Office, No. 12/88

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